BRAIN RESEARCH:
DEVELOPMENTAL BRAIN RESEARCH

VOL. 104 NOS. 1,2 **CONTENTS** **19 December 1997**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Publisher's Announcement v

Guidelines for the submission of manuscripts vii

Research reports

Calcium-dependent phosphorylation of glial fibrillary acidic protein (GFAP) in the rat hippocampus: a comparison of the kinase/phosphatase balance in immature and mature slices using tryptic phosphopeptide mapping
R.B. Leal, C.A. Gonçalves and R. Rodnight (Brazil) 1

Evidence for a role for calcium ions in the dephosphorylation of glial fibrillary acidic protein (GFAP) in immature hippocampal slices and in astrocyte cultures from the rat
L. Vinadé, C.A. Gonçalves, S. Wofchuk, C. Gottfried and R. Rodnight (Brazil) 11

Short- and long-term effects of perinatal asphyxia on monoamine, amino acid and glycolysis product levels measured in the basal ganglia of the rat
Y. Chen, E. Engidawork, F. Loidl, E. Dell'Anna, M. Goiny, G. Lubec, K. Andersson and M. Herrera-Marschitz (Sweden, Italy, Austria) 19

Chronic blockade of glutamate-mediated bioelectric activity in long-term organotypic neocortical explants differentially effects pyramidal/non-pyramidal dendritic morphology
R.E. Baker, P. Wolters and J. Van Pelt (The Netherlands) 31

Development and cell generation in the hippocampus of a marsupial, the quokka wallaby (*Setonix brachyurus*)
A.M. Harman (Australia) 41

Dopamine transporter development in postnatal rat striatum: an autoradiographic study with [^{3}H]WIN 35,428
C.L. Coulter, H.K. Happe and L.C. Murrin (USA) 55

Ontogeny of the L-type voltage sensitive calcium channels in chick embryo retinospheroids
A. Capela, A. Cristóvão, C. Carvalho and A.P. Carvalho (Portugal) 63

Diffusible factors produced by cultured neural retinal cells enhance in vitro differentiation of pineal cone photoreceptors of developing quail embryos
M. Araki (Japan) 71

Parallin, a cerebellar granule cell protein the expression of which is developmentally regulated by Purkinje cells: evidence from mutant mice
A.M. Smith and R.J. Mullen (USA) 79

Developmental changes in the electrical activity of locus coeruleus neurons during cortical spreading depression
Y. Fujii, S. Nakamura and H. Ito (Japan) 91

Leukemia inhibitory factor and ciliary neurotrophic factor regulate dendritic growth in cultures of rat sympathetic neurons
X. Guo, J. Metzler-Northrup, P. Lein, D. Rueger and D. Higgins (USA) 101

Effects of increased extracellular potassium on influx of sodium ions in cultured rat astroglia and neurons
S. Takahashi, M. Shibata and Y. Fukuuchi (Japan) 111

Changes in sodium channel function during postnatal brain development reflect increases in the level of channel sialidation
C. Castillo, M.E. Díaz, D. Balbi, W.B. Thornhill and E. Recio-Pinto (Venezuela, USA) 119

Short-term fasting alters neonatal rat striatal dopamine levels and serotonin metabolism: an in vivo microdialysis study
A. Ishida, W. Nakajima and G. Takada (Japan) 131

Carotid blood flow changes with behavioral states in the late gestation llama fetus in utero
C.E. Blanco, D.A. Giussani, R.A. Riquelme, M.A. Hanson and A.J. Llanos (Chile, UK, The Netherlands) 137

Developmental localization of retina cognin synthesis by in situ hybridization
J.L. Phillips, V. Holdengreber, Y. Ben-Shaul, J. Zhang, D.R. Tolan and R.E. Hausman (USA, Israel) 143

Neonatal hypothalamic *c-fos* expression in an excitotoxicity-induced model of precocious puberty
C.E. Smyth, M. Natarajan and M. Wilkinson (Canada) 153

Cocaine exposure in fetal rhesus monkey: consequences for dopamine D_1- and D_2-like receptor binding densities
Y. Fang, A. Janowsky and O.K. Rønnekleiv (USA) 163

Expression of adhesion molecules on human fetal cerebral vessels: relationship to microglial colonisation during development
P. Rezaie, N.J. Cairns and D.K. Male (UK) 175

(contents continued on p. 218)

0165-3806(19971219)103:1/2;1-R

(contents continued)

Short communications

Ontogeny of oxytocin and vasopressin receptor binding in the lateral septum in prairie and montane voles
Z. Wang and L.J. Young (USA) 191
The effect of GABAergic system activity on hyperthermia-induced seizures in rats
M. Fukuda, T. Morimoto, H. Nagao and K. Kida (Japan) 197
Age-related decrease in the antiseizure effect of ifenprodil against pentylenetetrazole in mice
M. Tsuda, T. Suzuki and M. Misawa (Japan) 201
Endothelial cell conditioned media mediated regulation of glutamine synthetase activity in glial cells
P.E. Spoerri, M.B. Grant, J. Gomez and A. Vernadakis (USA) 205
Convergent control of serotonin transporter expression by glucocorticoids and cocaine in fetal and neonatal rat brain
K.E. McGrath, F.J. Seidler and T.A. Slotkin (USA) 209

Author Index 215